



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,186	07/23/2001	Koji Ebisu	450100-03320	2348
20999 7590 03/20/2008 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER CHOWDHURY, SUMAIYA A	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 03/20/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/911,186

**Applicant(s)**

EBISU ET AL.

**Examiner**

SUMAIYA A. CHOWDHURY

**Art Unit**

2623

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No./Mail Date: \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/4/08 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 20-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claims 20-29 recite "A program execution method performed by an electronic apparatus...". However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized"). The

examiner suggests amending the claim to embody the program on computer-readable medium or equivalent in order to make the claim statutory. For example, the preamble of claim 20 should read --**A computer readable medium encoded with computer executable instructions that when executed by the computer result in:** --. Further, note that any amendment to the claim should be commensurate with its corresponding disclosure.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6, 7, 11 - 14, 16, 17, 20, 22, 23, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney (5,642,153) in view of Schein (6,002,394) and LaJoie (5850218), Elliot (5528670), Rao (5793410), Kusaba (6510556), and DeFreese (6493876).

Considering claim 1, Chaney discloses a television receiver (IRD receiver 612– Fig. 6-8), comprising:

a selector (tuner 734 – Fig.7) for receiving television broadcasting signals, wherein the selector selects one of the television broadcasting signals (col. 7, lines 1-2);

a display element (TV Receiver 611 – Fig. 6) for displaying a video based on a video signal of the television broadcasting signal selected by said selector (The user selects a program to view via the display element and remote control unit– col. 5, lines 40-50. Once the channel transponder carrying a desired television program is tuned, the video signal for that program can be selected. – col. 6, lines 8-12.);

a storage device (memory unit – col. 3, lines 66-67) for storing program selection information (program selection information comprises of a set of data known as master program guide - MPG) to be used to control said selector and channel numbers in a coordinated relationship and storing program-related information (executable computer programs); (The MPG comprises of information to map virtual channels to transponder frequencies - col. 3, lines 18-30. In addition to receiving television programs, executable computer programs are also received - col. 4, lines 9-16)

said program-related information used for execution of object processing programs and the channel numbers in a coordinated relationship (col. 4, lines 9-16, col. 3, lines 18-30);

an acceptance device (remote control – Fig. 7) for accepting a selective input of a channel number from a user (col. 5, lines 40-50, col. 7, lines 5-6 & lines 18-23);

a readout device (System Microcontroller 706 – Fig. 7, 806 – Fig. 8) for reading out information corresponding to the channel number accepted by said acceptance device from said storage device (The microcontroller (706 and 806) controls the interface between the IRD and the user via an IR link 725 - col. 7, lines 3-6. After

accepting the input, the MPG stored in the memory unit is used to map the input of the user to display the video – col. 3, lines 18-30 & lines 66-67);

a selection control device (706 – Fig. 7, 806 – Fig. 8) for controlling, when the information read out by said readout device (706 – Fig. 7, 806 – Fig. 8) is the program selection information, said selector based on the program selection information (Based on the user's input, the microprocessor (706 and 806) sends a frequency signal to the tuner (734) - col. 7, lines 18-25); and

a program execution device (microcontroller 706 – Fig. 7, 806 – Fig. 8) for executing, when the information read out by said readout device is the program-related information, a program in response to the program-related information (The microcontroller controls all the processes in the receiver system - col. 4, lines 9-20, col. 7, line 3).

Wherein said selection control device, upon, changing of a channel, executes a program associated with said channel (In addition to receiving television programs, the receiver is capable of receiving executable computer programs. – col. 4, lines 9-20. Based upon a user's channel selection, the microprocessor (806) sends a frequency signal to the tuner. This signal causes the tuner to tune to the appropriate channel and to downconvert the received signal in frequency in response to the tuning frequency signal sent to the tuner from microprocessor 806. An output signal from tuner 34 is provided to the demodulator. – col. 7, lines 19-26).

However, Chaney fails to disclose wherein the television receiver is adapted to specify one or more channels associated with:

- i. a predetermined ISP;
  - ii. a processing program for preparation, transmission or reception of electronic email;
  - iii. a transmission list that pertains to electronic mail to be transmitted;
  - iv. a reception list of electronic emails; and
  - v. one or more accessed web pages.
- vi. wherein a FLG is used to indicate whether a channel number is for selection of a television broadcasting signal or for selection of a program-related information or for selection of an external input signal.

vii. wherein when a program is not associated with a channel and an icon displayed on a display screen that displays the program is operated, a control means detects a free channel and associates the free channel with the program by storing the free channel number and programming-related information of the program as channel setting information,

wherein information used upon connection to a network is set to a first information setting table separate from a second information table containing channel setting information,

In an analogous art, Schein teaches:

a predetermined ISP (Web TV – col. 8, lines 3-8; Web TV is an ISP which provides internet access only to its subscribers.);

a processing program (Fig. 19A-19C) for preparation, transmission or reception of electronic email (Since the system is capable of allowing the user to transmit and

receive email, it has a processing program which allows preparation, transmission or reception of electronic email – col. 23, lines 19-36);

a reception list of electronic emails (Fig. 19B, col. 23, lines 19-36); and

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney's invention to include the above mentioned limitations, as taught by Schein, to enable the user to access messages and to allow the user to have access to diverse information from a single unit.

However, Chaney and Schein fail to teach:

one or more accessed web pages;

a transmission list that pertains to electronic mail to be transmitted;

wherein a FLG is used to indicate whether a channel number is for selection of a television broadcasting signal or for selection of a program-related information or for selection of an external input signal.

wherein when a program is not associated with a channel and an icon displayed on a display screen that displays the program is operated, a control means detects a free channel and associates the free channel with the program by storing the free channel number and programming-related information of the program as channel setting information,

wherein information used upon connection to a network is set to a first information setting table separate from a second information table containing channel setting information,



In an analogous art, LaJoie teaches a channel associated with one or more accessed web pages. Referring to fig. 5, channel 16 is associated with online services such as an e-mail service and world wide web browsing service. The web sites associated with these services are web sites accessed by the user or any other user. The claim does not specify who accesses the web page. Therefore, the examiner is reading it as if anyone has accessed the web site – col. 16, lines 24-30. Furthermore, LaJoie teaches a FLG is used to indicate whether a channel number is for selection of a television broadcast signal. Referring to fig. 5, channel 2 is associated with a television broadcast signal – col. 16, line 10- col. 17, line 30.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney and Schein's invention to include the above mentioned limitation, as taught by LaJoie, for the advantage of allowing the user to access the web from a television, and to allow the terminal to withstand changes in channel line-ups by the cable operator without invalidating any of the user's channel settings.

Although Schein teaches transmitting emails, Chaney, Schein, and LaJoie fail teach:

messages scheduled to be sent;

wherein when a program is not associated with a channel and an icon displayed on a display screen that displays the program is operated, a control means detects a free channel and associates the free channel with the program by storing the free

channel number and programming-related information of the program as channel setting information,

wherein information used upon connection to a network is set to a first information setting table separate from a second information table containing channel setting information;

In an analogous art, Elliot teaches scheduling messages to be sent at a future time (col. 8, lines 25-65).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, and LaJoie's invention to include the above mentioned limitation, as taught by Elliot, for the advantage of allowing the user to schedule transmission of messages at an appropriate time.

However, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese, fail to teach:

wherein when a program is not associated with a channel and an icon displayed on a display screen that displays the program is operated, a control means detects a free channel and associates the free channel with the program by storing the free channel number and programming-related information of the program as channel setting information,

wherein information used upon connection to a network is set to a first information setting table separate from a second information table containing channel setting information;

In an analogous art, Rao teaches detecting a free channel and associating the free channel with a program by storing the free channel number and programming-related information of the program as channel setting information, and wherein information used upon connection to a network is set to a table (col. 14, lines 21-35, col. 15, lines 15-37, col. 14, lines 27-67, col. 13, lines 4-12, col. 11, lines 60-62);

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese's invention to include the above mentioned limitation, as taught by Rao, for the advantage of conserving bandwidth.

However, Chaney, Schein, LaJoie, Elliot, and Rao fail to teach:

when a program is not associated with a channel, an icon displayed on a display screen; and

wherein information used upon connection to a network is set to a table separate from a table containing channel setting information;

In an analogous art, Kusaba teaches when a program is not associated with a channel, an icon displayed on a display screen which allows the user to designate a channel for the program to be transmitted on (Fig. 4C, col. 4, lines 40-64).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, LaJoie, Elliot, and Rao's invention to include the above mentioned limitation, as taught by Kusaba, for the advantage of allowing the user to select the channel on which the video data should be transmitted.

However, Chaney, Schein, LaJoie, Elliot, Rao, and Kusaba fail to teach wherein information used upon connection to a network is set to a table separate from a table containing channel setting information;

In an analogous art, DeFreese teaches wherein information used upon connection to a network is set to a table separate from a table containing channel setting information (Referring to fig. 5, the other service type in service table 103 is used for online services (col. 16, lines 29-34). The channels which carry video data correspond to video parameter table 105 and the online service table corresponds to table 131 (col. 17, lines 14-45).);

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, LaJoie, Elliot, Rao, and Kusaba's invention to include the above mentioned limitation, as taught by DeFreese, for the advantage of providing distinct tables corresponding to their respective sources, thereby simplifying a table by have a separate table for each source.

Considering claim 2, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese disclose a television receiver wherein said acceptance device (remote control) includes channel up/down keys for accepting selective inputs of the channel number in forward and reverse directions, respectively (Chaney, col. 5, lines 42-45).

Considering claim 3, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese disclose a television receiver, wherein the program-related information coordinated with

at least one of the channel numbers relates to a processing program which can be executed by said television receiver (The television receiver receives executable computer program on various channels. MPG comprises of information to map virtual channels to transponder frequencies – Chaney, col. 3, lines 18-30, col. 4, lines 9-16).

Considering claim 4, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese disclose the television receiver further comprising a communication device (Antenna 605, 705, 805 – Fig 6-8) for connecting said television receiver to a communication network (satellite communication network 613 – Fig. 6 & 8), wherein the program-related information coordinated with at least one of the channel numbers relates to a program to be executed to allow at least said television receiver to receive information through said communication device – Chaney, col. 3, lines 18-30, col. 4, lines 9-16, col. 6, lines 48-52.

Considering claim 6, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese disclose the television receiver comprising a communication device (Chaney - Antenna 605, 705, 805 – Fig. 6-8) for connecting said television receiver to a communication network (Chaney - satellite communication network 613 – Fig. 6 & 8), and a transmission information storage device (memory unit) for storing transmission information (Chaney - MPG – Fig. 1 & 2) to be transmitted through said communication device, wherein the program-related information coordinated with at least one of the channel numbers relates to a program to be executed to cause at least display

information of the transmission information stored in said transmission information storage device to be displayed on said display element (The MPG is received by the satellite and saved onto the memory unit – Chaney, col. 3, lines 60-67. The MPG comprises of transmission information – Chaney, col. 4, lines 20-67, Fig.1 & 2. The transmission information is the content that is received, the program guide.).

Considering claim 7, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese disclose the television receiver comprising a display information storage device (memory unit) for storing display information (program guide screen display – Chaney, Fig. 3) to be displayed on said display element (TV receiver 611- Chaney, Fig. 6), and wherein the program-related information coordinated with at least one of the channel numbers relates to a program to be executed to cause at least a video corresponding to the display information stored in said display information storage device to be displayed on said display element (The MPG which is the program guide is saved in the memory unit. The MPG relates program titles, their start and end times, and a virtual channel number to be displayed to the user – Chaney, col. 3, lines 18-23 & 65-67, col. 5, lines 39-50, The program components and virtual channels of the program guide are interrelated by the SCID – Chaney, col. 4, lines 37-42. A user selects to view a program comprising of video content listed in the program guide – Chaney, col. 5, lines 40-50, col. 4, lines 27-29).

Claims 11 & 20 contain the limitations of claim 1 and are analyzed as previously discussed with respect to that claim.

Claim 12 contains the limitations of claim 2 and is analyzed as previously discussed with respect to that claim.

Claims 13 & 22 contain the limitations of claim 3 and are analyzed as previously discussed with respect to that claim.

Claims 14 & 23 contain the limitations of claim 4 and are analyzed as previously discussed with respect to that claim.

Claims 16 & 25 contain the limitations of claim 6 and are analyzed as previously discussed with respect to that claim.

Claims 17 & 26 contain the limitations of claim 7 and are analyzed as previously discussed with respect to that claim.

7. Claims 5, 8, 15, 18, 24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese as applied to claim 1 above, and further in view of Sorensen (6,598,226).

Considering claim 5, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese disclose a television receiver comprising a communication device (Chaney - Antenna 605, 705, 805 – Fig 6-8) for connecting said television receiver to a communication network (Chaney, satellite communication network 613 – Fig. 6), and a received information storage device (memory unit) for storing received communication received through said communication device (Chaney, col. 3, lines 63-67, col. 4, lines 1-4), wherein program-related information coordinated with at least one of the channel numbers relating to a program to be executed.

However, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese fail to disclose that the display information of the received information stored in said received information storage device is to be displayed on said display element.

In an analogous art, Sorensen discloses that the executable programs associated with their respective channel number are stored in memory (20, received information storage device). The new received information is then displayed on a menu (32) on a display element for the user to select from – col. 3, lines 55-60, col. 4, lines 37-50.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese's system to include program-relating information coordinated with at least one of the channel numbers relating to a program to be executed to cause at least display information of the received information stored in said received information storage device to be displayed on said display element, as taught by Sorensen, for the



advantage of providing the user an updated menu of received content on a television receiver.

Considering claim 8, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese disclose the television receiver further comprising an instruction input acceptance device (microcontroller 706) for accepting a display instruction input (SELECT key) of a list (program guide) of the information stored in said storage device (col. 7, lines 3-7, col. 5, lines 40-50). However, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese fail to disclose a list display signal formation device for forming, when an instruction to display the list is accepted by said instruction input acceptance device, a displaying signal for displaying the list of the information stored in said storage device on said display element.

In an analogous art, Sorensen discloses that the operator interface module (21-Fig. 1) can display the menu (32, list). The menu could be displayed on a designated channel to which the user could tune when desired – col. 4, lines 38-47. The list of the information stored in memory (20) is displayed – col. 3, lines 55-59, col. 4, lines 7-12.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese's system to include a list display signal formation device for forming, when an instruction to display the list is accepted by said instruction input acceptance device, a displaying signal for displaying the list of the information stored in said storage device on said display element, as taught by Sorensen, for the advantage of providing the user

with the convenient function of displaying a menu when desired by the user, which can only be displayed by the operator interface module in the receiver.

Claims 15 & 24 contain the limitations of claim 5 and are analyzed as previously discussed with respect to that claim.

Claims 18 & 27 contain the limitations of claim 8 and are analyzed as previously discussed with respect to that claim.

8. Claims 9 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese in view of Sorensen as applied to claim 8 above, and further in view of Usui (6,075,570).

Considering claim 9, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese and Sorensen disclose that the said readout device (microcontroller 706) uses a channel number corresponding to a display item of the list displayed at the selected position of said display screen detected by selected position detection device as a channel number selected by the user (The microcontroller (706) controls the interface between the remote control and the receiver. When the user selects a program on the display screen, the x and y position of the cursor is evaluated to derive virtual channel and program guide information – col. 5, lines 40-50). However, Chaney, Schein,

LaJoie, Elliot, Rao, Kusaba, and DeFreese and Sorensen fail to disclose that the television receiver comprises of touched position detection device.

In an analogous art, Usui discloses a television receiver comprising a touched position detection device (touch panel 262 – Fig. 16) provided on a display screen (LCD panel 261 – Fig. 16) of said display element for detecting a touched position of said display screen touched by a user (col. 15, lines 34-45).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese and Sorensen's system to include a touched position detection device, as taught by Usui, for the advantage of providing the user the convenience of only using a finger to select a desired program on a television receiver.

Claim 28 contain the limitations of claim 9 and is analyzed as previously discussed with respect to that claim.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese in view of Ellis (6,470,497).

Considering claim 21, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese disclose that the program execution method wherein, in the step of accepting, selective inputs of the channel number are accepted successively – Chaney, col. 5, lines 42-45.

However, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese fail to disclose that the channel numbers are accepted in a forward or reverse direction of the channel number.

In an analogous art, Ellis discloses that when a directional arrow key is pressed, the user controls the scan to go forward or backward in the channel sequence – col. 10, lines 23-34.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese's system to include channel numbers which are accepted in a forward or reverse direction of the channel number by the system, as taught by Ellis, for the advantage of providing the user the convenience of browsing in a backward or forward sequence without having to input in a specific channel number each time to view a channel.

10. Claim 10, 19, & 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese in view of Menand (5,563,648).

Considering claims 10, Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese fail to disclose a television receiver wherein said program execution device executes the program from a process which was being executed upon switching from a channel number to which the program is allocated to another channel number.

In an analogous art, Menand discloses a system in which a user first deactivates a current AVI program. The user then changes channels or performs other normal remote control functions. Following that, the user may then switch back to the AVI program – col. 12, lines 25-41.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Chaney, Schein, LaJoie, Elliot, Rao, Kusaba, and DeFreese's system to include a program execution device which executes the program from a process which was being executed upon switching from a channel number to which the program is allocated to another channel number, as taught by Menand, for the advantage of providing the user the convenience of switching between two channels without losing where the user last left off in a television receiver.

Claim 19 & 29 contain the limitations of claim 10 and is analyzed as previously discussed with respect to that claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUMAIYA A. CHOWDHURY whose telephone number is (571)272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John W. Miller/  
Supervisory Patent Examiner, Art  
Unit 2623

SAC